

**REMARKS**

Claims 1-20 are pending in this application. By this Amendment, Applicant has amended claim 1 to include the limitations of claims 2-4, and has canceled claims 2-4, and 16-20.

Additionally, claims 5-10 and 12 have been amended to depend on claim 1 rather than claim 4, and claims 11 and 12 have been to overcome some informalities as set for below . Accordingly, claims 1 and 5-15 are at issue.

The Examiner has objected to the drawings under 37 CFR 1.83(a). Applicant is submitting replacement sheets 1-3 with corrected drawings. No new matter was added by the replaced drawings and the changes to the drawings are fully supported by the specification as originally filed. Specifically, the Examiner has maintained that “the claimed digital phase-locked loop circuit comprising an edge detector, a digitally implemented loop counter and a digitally implemented phase counter must be shown.” However, as set forth in the present specification, “[t]he complete design [of the present invention] can be made to fit into as few as seven registers of a programmable logic chip or ASIC 34, such as that shown in FIG 7.” (Underlining added, Application, p. 8, lines 4-5). The revised FIG. 7 shows the elements of the recovery circuit (e.g., edge detector, loop counter and phase counter) in phantom in the logic chip or ASIC 34. Accordingly, Applicant respectfully submits this objection is now moot.

The Examiner has also objected to the drawings under 37 CFR 1.83(p)(5). Applicant is submitting replacement drawings wherein Figure 1 includes the reference number “12” for the phase detector of the circuit shown. Additionally, Applicant has amended the specification to remove the reference number “23” from page 6, line 10. No new matter was added by the replaced drawings and the changes to the drawings are fully supported by the specification as originally filed. Accordingly, Applicant respectfully submits this objection is now moot.

The Examiner has objected to the specification. Applicant has amended the specification to designate the state transition diagram illustrated in Figure 5 as reference number “31” rather than “30.” The replaced drawings have added the reference number “30” to the non-linear phase counter of Figure 4, and changed the reference number “30” to “31” in Figure 5 to correspond with the written specification. The change in numbering is for clarification purposes only and does not add any new matter to the application. Accordingly, Applicant respectfully submits this objection is now moot.

The Examiner objected to claims 11-13 because of certain informalities. By this Amendment, Applicant has amended claims 11 and 12 in accordance with the Examiner’s suggestion. Accordingly, Applicant respectfully submits this objection is moot.


The Examiner has indicated that claims 4-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. By this Amendment, Applicant has amended claim 1 to include the limitations of claim 4 and intervening claims 2-3. Accordingly, Applicant respectfully submits claims 1 and 5-13 are now in condition for allowance. Additionally, because claims 14 and 15 depend on claim 1, Applicant respectfully submits that by this Amendment, claims 14 and 15 are also in condition for allowance.

**CONCLUSION**

Claims 1-20 are currently pending in the present application. Of these, claims 2-4 and 16-20 have been canceled, leaving Claims 1 and 5-15 for examination. Applicant has amended Claims 1, 5-12. In light of the amendments and the above-remarks, Applicant believes all considered claims are now in condition for allowance. Reconsideration of these claims is respectfully requested.

Respectfully submitted,

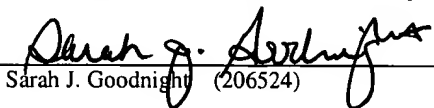
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By:   
Richard C. Himelhoch, Reg. No. 35,544  
Customer No. 26958  
Wallenstein Wagner & Rockey, Ltd.  
311 So. Wacker Drive – 53<sup>rd</sup> Floor  
Chicago, IL 60606  
(312) 554-3300

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Sarah J. Goodnight (206524)